aiwa

Compact Disc Stereo System

NSX-DS50
NSX-DS55

U

COMPACT disc DIGITAL AUDIO

For assistance and information
call toll free 1-800-BUY-AIWA
(United States and Puerto Rico)

8B-NCK-903-01
010115AKH-U-M

OPERATING INSTRUCTIONS — En (English)

MANUAL DE INSTRUCCIONES — E (Español)

MODE D'EMPLOI — F (Français)

PRECAUTIONS

WARNING

To reduce the risk of fire or electric shock, do not expose this appliance to rain or moisture.

CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN
"CAUTION:TO REDUCE THE RISK OF ELECTRIC SHOCK,
DO NOT REMOVE COVER (OR BACK).
NO USER-SERVICEABLE PARTS INSIDE.
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL."

Explanation of Graphical Symbols:

The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

Read these Operating Instructions carefully and completely before operating the unit. All precautions on this booklet and on the unit should be strictly followed.
Keep the Operating Instructions for future reference.

Installation

1 **Water and moisture** — Do not use this unit near water, such as near a bathtub, washbowl, swimming pool, or the like.

2 **Heat** — Do not use this unit near sources of heat, including heating vents, stoves, or other appliances that generate heat. It also should not be placed in temperatures less than 5°C (41°F) or greater than 35°C (95°F).

3 **Mounting surface** — Place the unit on a flat, even surface.

4 **Ventilation** — The unit should be situated with adequate space around it so that proper heat ventilation is assured. Allow 10 cm (4 in.) clearance from the rear and the top of the unit, and 5 cm (2 in.) from each side.
- Do not place the unit on a bed, rug, or similar surface that may block the ventilation openings.
- Do not install the unit in a bookcase, cabinet, or airtight rack where ventilation may be impeded.

5 **Objects and liquid entry** — Take care that objects or liquids do not get inside the unit through the ventilation openings.

6 **Carts and stands** — When placed or mounted on a stand or cart, the unit should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the unit or cart to overturn or fall.

7 **Condensation** — Moisture may form on the CD pickup lens when:
- The unit is moved from a cold spot to a warm spot
- The heating system has just been turned on
- The unit is used in a very humid room
- The unit is cooled by an air conditioner

When this unit has condensation inside, it may not function normally. Should this occur, leave the unit for a few hours, then try to operate again.

8 **Wall or ceiling mounting** — The unit should not be mounted on a wall or ceiling, unless specified in the Operating Instructions.

Electric Power

1 **Power sources** — Connect this unit only to power sources specified in the Operating Instructions, and as marked on the unit.

2 **Polarization** — As a safety feature, some units are equipped with polarized AC power plugs which can only be inserted one way into a power outlet. If it is difficult or impossible to insert the AC power plug into an outlet, turn the plug over and try again. If it still does not easily insert into the outlet, please call a qualified service technician to service or replace the outlet. To avoid defeating the safety feature of the polarized plug, do not force it into a power outlet.

3 **AC power cord**
- When disconnecting the AC power cord, pull it out by the AC power plug. Do not pull the cord itself.
- Never handle the AC power plug with wet hands, as this could result in fire or shock.
- Power cords should be firmly secured to avoid being severely bent, pinched, or walked upon. Pay particular attention to the cord from the unit to the power outlet.
- Avoid overloading AC outlets and extension cords beyond their capacity, as this could result in fire or shock.

4 **Extension cord** — To help prevent electric shock, do not use a polarized AC power plug with an extension cord, receptacle, or other outlet unless the polarized plug can be completely inserted to prevent exposure of the blades of the plug.

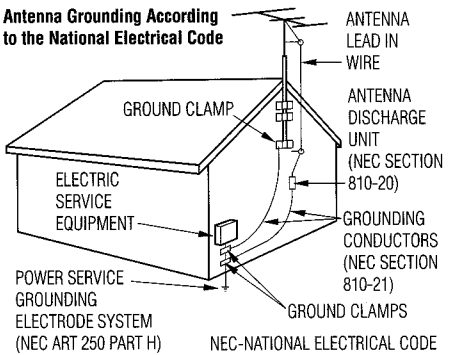
5 **When not in use** — Unplug the AC power cord from the power outlet if the unit will not be used for several months or more. When the cord is plugged in, a small amount of current continues to flow to the unit, even when the power is turned off.

Outdoor Antenna

1 Power lines — When connecting an outdoor antenna, make sure it is located away from power lines.

2 Outdoor antenna grounding — Be sure the antenna system is properly grounded to provide protection against unexpected voltage surges or static electricity build-up. Article 810 of the National Electrical Code, ANSI/NFPA 70, provides information on proper grounding of the mast, supporting structure, and the lead-in wire to the antenna discharge unit, as well as the size of the grounding unit, connection to grounding terminals, and requirements for grounding terminals themselves.

Antenna Grounding According to the National Electrical Code


ANTENNA LEAD IN WIRE
ANTENNA DISCHARGE UNIT (NEC SECTION 810-20)
GROUND CLAMP
ELECTRIC SERVICE EQUIPMENT
GROUNDING CONDUCTORS (NEC SECTION 810-21)
POWER SERVICE GROUNDING ELECTRODE SYSTEM (NEC ART 250 PART H)
GROUND CLAMPS
NEC-NATIONAL ELECTRICAL CODE

Maintenance

Clean the unit only as recommended in the Operating Instructions.

Damage Requiring Service

Have the units serviced by a qualified service technician if:

- The AC power cord or plug has been damaged
- Foreign objects or liquid have gotten inside the unit
- The unit has been exposed to rain or water
- The unit does not seem to operate normally
- The unit exhibits a marked change in performance
- The unit has been dropped, or the cabinet has been damaged

DO NOT ATTEMPT TO SERVICE THE UNIT YOURSELF.

OWNER'S RECORD

Record the model number and serial number of your set (found at the rear of your set) below. Refer to them when contacting your Aiwa dealer.

Model No. _____

Serial No. _____

As an ENERGY STAR® Partner, AIWA has determined that this product meets the ENERGY STAR® guidelines for energy efficiency.

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System and accessories

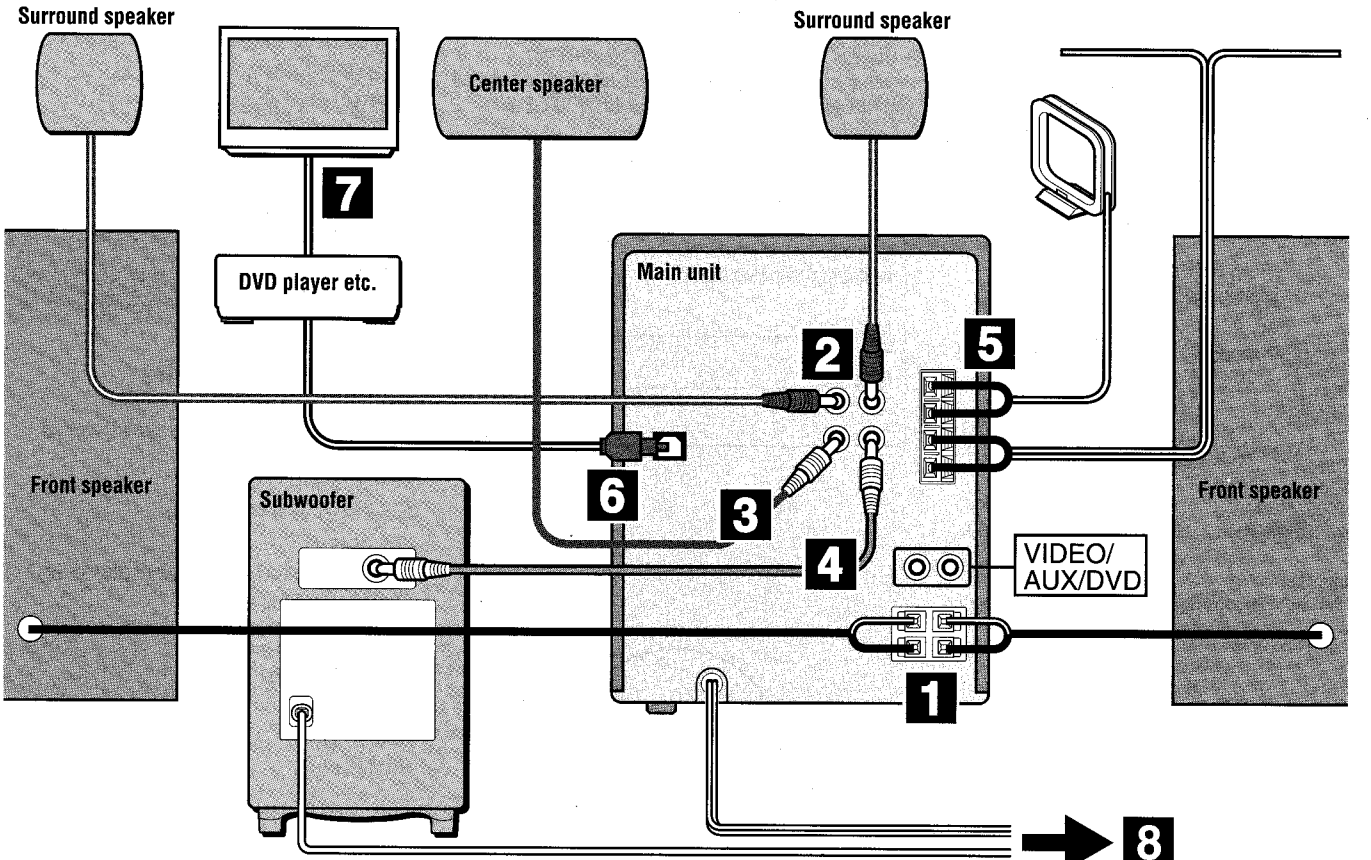
NSX-DS50
CX-NDS50 Compact disc stereo cassette receiver
SX-NAJ502 Front speakers
SX-R290 Surround speakers
SX-C610 Center speaker

NSX-DS55
CX-NDS55 Compact disc stereo cassette receiver
SX-NAJ502 Front speakers
SX-R290 Surround speakers
SX-C610 Center speaker
TS-WM6 Subwoofer

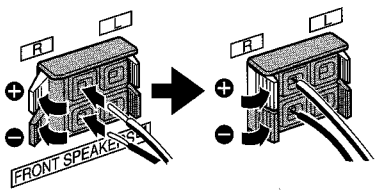
Remote control
FM antenna
AM antenna

Connection

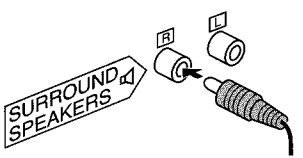
Plug in the AC power cord to the AC power outlet after all other connections are made.



1 Connect the front speakers.
Connect the right front speaker to the FRONT SPEAKERS R terminals and the left to the FRONT SPEAKERS L terminals. The speaker cords with the white stripes go to the ⊕ terminals.



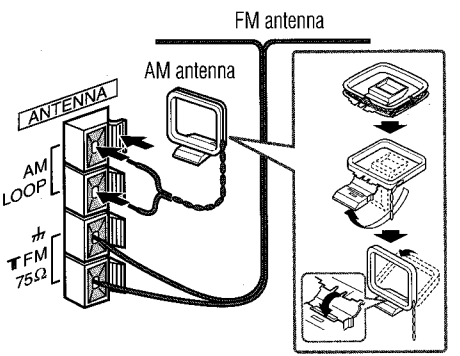
2 Connect the surround speakers.
Connect each surround speaker cord to the SURROUND SPEAKERS R jack or the SURROUND SPEAKERS L jack.



3 Connect the center speaker.
Connect the center speaker cord to the CENTER SPEAKER jack.

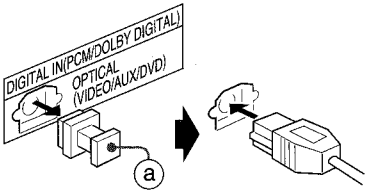
4 Connect the subwoofer (only for NSX-DS55).
Connect the subwoofer cord to the SUB WOOFER jack.
- Refer to the Operating Instructions of TS-WM6 for the details.

5 Connect the supplied antennas.
Connect the FM antenna to the FM 75 Ω terminals and the AM antenna to the AM LOOP terminals.



6 Connect the video equipment (DVD player, LD player, video tape player, etc.).
If the video equipment has an OPTICAL OUT jack:
Remove the dust cap ⓐ from the DIGITAL IN (PCM/DOLBY DIGITAL) OPTICAL (VIDEO/AUX/DVD) jack of this unit. Then, connect the OPTICAL OUT jack to the DIGITAL IN (PCM/DOLBY DIGITAL) OPTICAL (VIDEO/AUX/DVD) jack with an optional optical connecting cord.

Tip:
To activate the spectrum analyzer and enable recording, connect the digital equipment also by analog connection to the VIDEO/AUX/DVD jacks (see below).



If the video equipment does not have a digital out jack:
Connect the AUDIO OUT jacks of the video equipment to the VIDEO/AUX/DVD jacks of this unit with an optional audio connecting cord with RCA phono plugs (red plug to the R jack, white plug to the L jack).
- When connecting an LD player via its AC-3 RF OUT jack, use an RF demodulator to separate the analog visual signals and the digital audio signals. Refer to the Operating Instructions of the LD player.

7 Connect the television to the video equipment.
Refer to the Operating Instructions of the connected equipment for details.

8 Connect the AC power cord to an AC outlet.
When the AC power cord is connected to an AC outlet for the first time, DEMO appears on the display.
To deactivate the DEMO, press DEMO/ECO.

- Do not short-circuit the ⊕ and ⊖ speaker cord leads.
- Do not leave objects generating magnetism or objects affected by magnetism near the speakers.

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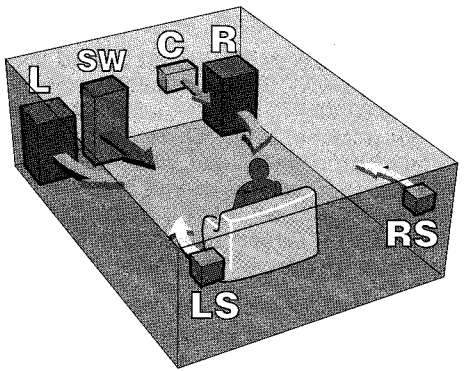
Positioning the speakers

To achieve the optimum effects obtainable with the Dolby Digital or the Dolby Pro Logic system, it is important to position the speakers properly. Refer to the following illustration to find out the best location in your room.



L&R: Front speakers

C: Center speaker

Position in the center of the two front speakers. In addition, position on or below the TV set, if connecting a TV set to the unit.

LS&RS: Surround speakers

Place the surround speakers directly to the side of or slightly behind the listening area. Align them horizontally, about 1 meter (3.2 feet) above ear height.

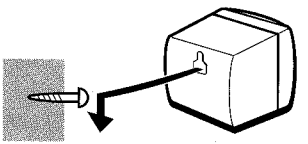
SW: Subwoofer

Place the subwoofer on the floor close to a wall or in a corner of the room.

- Sound output from the center and the surround speakers is only available when the Dolby Digital system or the Dolby Pro Logic system is activated with the appropriate setting.

To mount the surround speakers on the wall

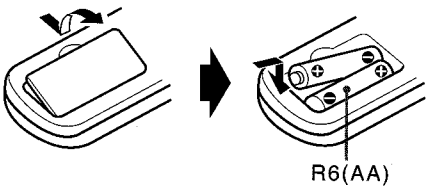
Mount each speaker on a spot that can hold its weight.



AIWA disclaims any responsibility for injury to persons or other accidents caused by not fitting the surround speakers properly or if the place of the installation is not suitable.

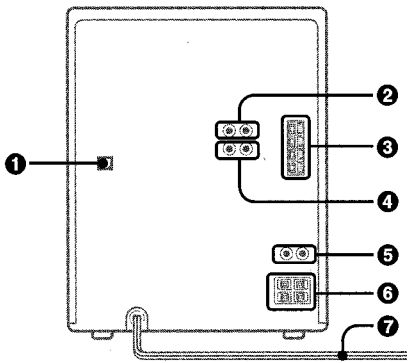
Remote control

Detach the battery compartment lid at the rear of the remote control and insert two R6 (size AA) batteries with correct polarity.



- Replace the batteries with new ones when the operational distance between the remote control and main unit becomes shorter.
- Remove the batteries if the unit is not going to be used for an extended period of time.
- The remote control may not operate if it is used under intense sunlight, etc., or if its line of sight is obstructed.

Main unit: rear



❶ **DIGITAL IN (PCM/DOLBY DIGITAL) OPTICAL (VIDEO/AUX/DVD) jack**
Accepts Dolby Digital signals as well as PCM signals (conventional digital audio signals, used, for example, in audio CDs) from external digital equipment.
When this jack is not being used, attach the supplied dust cap.

❷ **SURROUND SPEAKERS jacks**
Connect the speaker cord of the supplied surround speakers here.

❸ **AM LOOP, FM 75 Ω terminals**
Plug in the supplied AM and FM antennas here.

❹ **CENTER SPEAKER jack**
Connect the speaker cord of the supplied center speaker here.

SUB WOOFER jack
Connect the speaker cord of the supplied subwoofer (only for NSX-DS55) or an optional powered subwoofer with a built-in amprifier here.

❺ **VIDEO/AUX/DVD jacks**
Accepts analog sound signals from external equipment.

❻ **FRONT SPEAKERS terminals**
Connect the speaker cord of the supplied front speakers here.

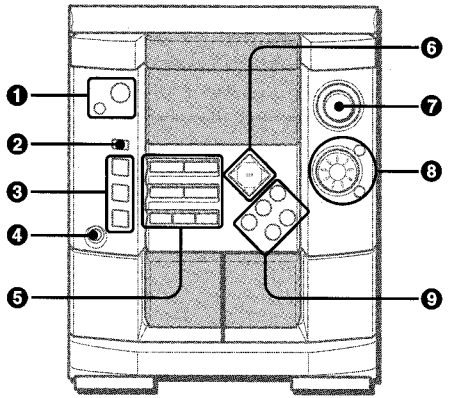
❼ **AC power cord**

Dynamic Integrated Neo Amplifier

Is a brand-new amplifier system where clear mid-to-high range frequency sound, as well as rich low frequency sound, can be reproduced and listeners can enjoy the close-to-original sound with less distortion at either high or low volume levels.

En

Main unit: front



1 POWER ⏻STANDBY/ON
Switches the unit on and off (standby).

DEMO/ECO
When the unit is turned off: switches DEMO on and off.
When the unit is turned on: enters ECO or dimmer setting mode.

2 SURROUND
Selects a Dolby Surround mode.

3 GEQ
Selects a sound equalization curve.

BBE
Enhances high frequency sound.

T-BASS/LFE
Emphasizes low frequency sound and adjusts the low-frequency effect level of the Dolby Digital sound.

4 PHONES jack
Plug in here an optional headphones set with a standard stereo plug (ø6.3 mm). Speaker output is canceled.

5 ■CLEAR
CD and Tape: stops playback.
Radio: clears a station preset.

►PRESET
CD and Tape: starts playback.
Radio: tunes into a preset station.

◄◄/I◄◄DOWN, ►►/►►IUP TUNING
CD: skips to a previous or a succeeding track when pressed, searches a track in fast forward or fast reverse playback when held down.
Tape: fast forwards or rewinds the tape.
Radio: manually tunes down or up within the band.

❚❚SET
CD and Tape: pauses playback.
Radio: stores the received station to preset.

SYNC DUB
Starts dubbing a whole tape.

●REC/REC MUTE
Starts recording.

6 TAPE DECK 1/2
Selects Tape function, and deck 1 or 2.

TUNER/BAND
Selects Radio function and the radio band.

VIDEO/AUX/DVD
Selects the function of external equipment connected to DIGITAL IN (PCM/DOLBY DIGITAL) OPTICAL (VIDEO/AUX/DVD) jack or VIDEO/AUX/DVD jacks.

CD
Selects CD function.

7 VOLUME
Adjusts the volume.

8 MULTI JOG
CD: skips to a previous or a succeeding track.
Radio: selects a preset number.
Clock and Timer: sets the time.
ECO and Dimmer: selects the mode.

ENTER
Determines the mode and the time (ECO, dimmer, clock and timer).

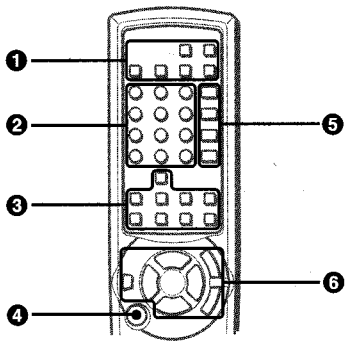
TIMER
Enters timer setting mode.

9 DISC DIRECT PLAY 1-3
Selects a CD tray.

DISC CHANGE
Rotates the CD trays.

▲OPEN/CLOSE
Opens or closes the disc compartment.

Remote control



Buttons with same or similar names with the main unit basically have the same function.

❶ **CD EDIT/CHECK**
Displays the remaining playback time of a CD when pressed during playback.
Enters AI Edit Recording or Programmed Edit Recording mode when pressed during stop.

PRGM
Enters programmed CD playback mode.

TIMER

SLEEP
Enters sleep-timer setting mode.

CLOCK
Enters clock adjustment mode.

RANDOM/REPEAT
Enters random or repeat CD playback mode.

❷ **0-9, +10**
CD: selects a CD track of the specified number.
Radio: tunes in to the station with the specified preset number.

CD DIRECT
Selects a CD tray with the numbered button (1-3).

❸ **MONO TUNER**
Switches between stereo or monaural FM reception.

T-BASS

GEQ

SURROUND

MANUAL SELECT
Adjusts speaker level or delay time.

CENTER LEVEL (+, −)
Adjusts the sound level of the center speaker for Dolby Surround.

REAR LEVEL (+, −)
Adjusts the sound level of the surround speakers for Dolby Surround.

❹ **POWER**

❺ **TAPE/DECK 1/2**

TUNER/BAND

VIDEO/AUX

CD

❻ **II SET**

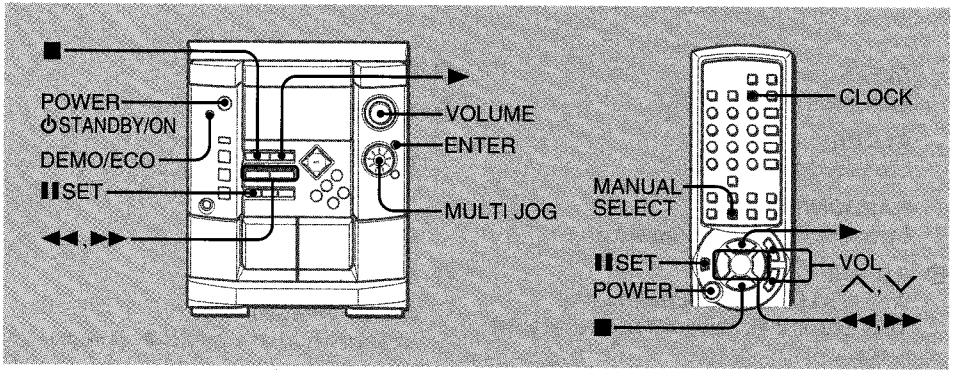
►/◄► PRESET
The function is the same as that of ► on the main unit.

◄◄/I◄◄ DOWN, ►►/►►I UP TUNING

■ CLEAR

VOL(∧, ∨)

En



Power

Turning the unit on

Press POWER ⏻STANDBY/ON (POWER on the remote control).

Or press TAPE, TUNER/BAND, VIDEO/AUX/DVD or CD, the playback will start automatically if a disc or tape is inserted.

Turning the unit off

Press POWER ⏻STANDBY/ON again.

The unit goes into standby.

Volume

Turn VOLUME (Press VOL ∧, ∨ on the remote control).

Adjust from 0 (minimum) to 49 and MAX (maximum).

Tip:

Volume level setting is retained during power-off standby. If the unit is turned off with the volume set to 21 or more, it is automatically turned down to 20 the next time the unit is turned on.

To change the left/right balance

Press MANUAL SELECT repeatedly on the remote control until "**L/R**" is displayed. Then, press ◀◀ or ▶▶ within 4 seconds.

- The front speakers level for the Dolby Digital and Dolby Pro Logic systems is changed as well.

DEMO

If the clock has not been set, a DEMO appears on the display when the unit is turned off. There are two kinds of DEMO: "Illumination demo" and "Game demo". You can enjoy both on the unit.

To deactivate and activate the DEMO

Press DEMO/ECO when the unit is turned off.

To switch between "Illumination demo" and "Game demo"

Hold down DEMO/ECO and press POWER.

To play the Game demo

Press ▶ so that three numbers start to run and then press ■ three times to stop the numbers.

If the three numbers are equal, you win points. If not, you lose them.

Tip:

To change the winning probability, press ◀◀ or ▶▶ so that the CD tray number indicator changes between 1 (lowest) and 3 (highest).

ECO mode

Reduces power consumption with the following operations, etc.

ECO ON mode

- The unit blacks out when the unit is turned off. Only the red indicator lights up. (Only when the clock is set.)
- If dimmer mode is set to on, the unit illumination brightens (for 10 seconds) only when you operate the unit.
- When the unit turns on with the timer recording, the dimmer mode is set to dimmest and the volume is set to minimum.

ECO AUTO mode

- In addition to the operations of ECO ON mode, the unit automatically turns itself off if you do not operate the unit and the sound source is mute for 10 minutes except when external digital input is selected.

1 Press DEMO/ECO once when the unit is turned on, and then within 4 seconds press ENTER.

2 Turn MULTI JOG to select one of the ECO modes and then press ENTER.
If there is no MULTI JOG or button operation within 4 seconds, the setting is canceled.

To cancel the ECO mode

Repeat the above and select "ECO OFF".

Dimmer

Adjusts the brightness of the display.

1 Press DEMO/ECO twice when the unit is turned on, and then within 4 seconds press ENTER.

2 Turn MULTI JOG to select one of the three dimmer modes or "DIM-OFF", and then press ENTER.
"DIM-OFF" is the brightest and "DIMMER 3" is the dimmest.
If there is no MULTI JOG or button operation within 4 seconds, setting is canceled.

To cancel the dimmer

Repeat the above and select "DIM-OFF".

Setting the clock

1 Press CLOCK on the remote control.

2 Press ◀◀ or ▶▶ to set the time.
Each press changes the time in 1-minute steps. Holding it down changes the time in 10-minute steps.
If ◀◀ or ▶▶ is not pressed within 4 seconds, setting is canceled.
• MULTI JOG is also available in place of ◀◀ or ▶▶.

3 Press ENTER or ❚❚SET.
The time display stops flashing and the clock starts from 00 seconds.

To display the time

Press CLOCK on the remote control.
The time will be displayed for 4 seconds, but it cannot be displayed during recording.

To switch to the 24-hour standard

Display the time and press ■ within 4 seconds.
With each press, the clock alternates between the 12-hour standard and the 24-hour standard.

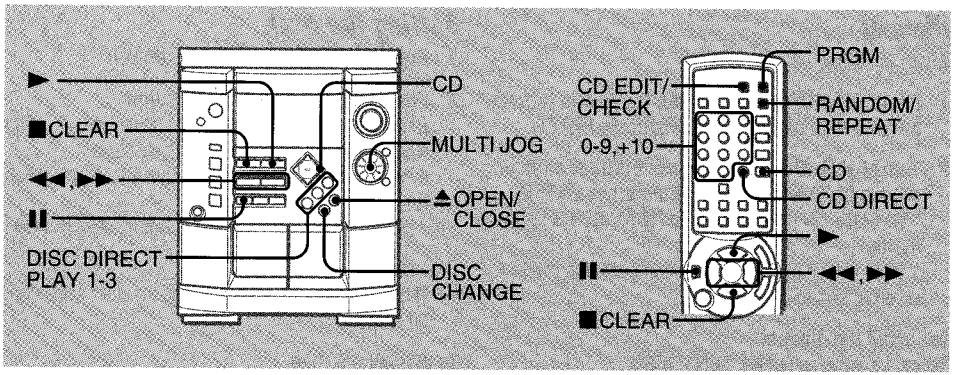
Tip:

In the 12-hour standard, "AM 12:00" indicates midnight and "PM 12:00" noon.

If the clock display flashes when the unit is turned off

There has been a power interruption. Re-set the clock.

En



This unit plays back finalized CD-R/RW discs as well as audio CDs.

Playback

1 Press CD and load disc(s)
Press ⏏OPEN/CLOSE to open the disc compartment and place one or two disc(s) with the labeled side up.
To place three discs, press DISC CHANGE so that the trays rotate, then place the third one. Lastly, close the compartment with ⏏OPEN/CLOSE.
- When loading an 8-cm (3-inch) disc, place it on the inner circle of the tray.

2 To play all discs, press ▶.
To play one desired disc, press DISC DIRECT PLAY 1-3.

To stop playback
Press ■.

To pause playback
Press II. Press again to resume playback.

To skip to the beginning of the current/preceding/succeeding track
Press ◀◀ or ▶▶ repeatedly or turn MULTI JOG.

To search (playback in fast forward or fast reverse)
Hold down ◀◀ or ▶▶. Release at the desired point.

To select a disc and a track with the remote control
1 Press CD DIRECT and within 3 seconds press the numbered button (1-3) to select a disc.
2 Press the numbered buttons to select a track.
- To select track 25, press +10, +10 and 5.
- To select track 10, press +10 and 0.

To display the remaining playback time of the CD
Press CD EDIT/CHECK on the remote control. Press again to return to the elapsed time display.
- Remaining playback time cannot be displayed during random playback or programmed playback.

To replace disc(s) during playback without interruption
While one disc is being played back, press DISC CHANGE so that the compartment opens, replace disc(s) with other one(s), and press DISC CHANGE to close the compartment.

Random/Repeat playback

Random playback plays all the tracks on one desired disc or all the discs in random order. Repeat playback plays all the tracks repeatedly on one desired disc or all the discs.

1 Press RANDOM/REPEAT repeatedly on the remote control to select one of the following modes:
- Random playback: "RANDOM" lights up.
- Repeat playback: "↻" lights up.
- Random and repeat playback: "RANDOM" and "↻" lights up.

2 To play one desired disc, press DISC DIRECT PLAY 1-3.
To play all discs, press ▶.

To cancel random/repeat playback
Press RANDOM/REPEAT repeatedly on the remote control so that both "RANDOM" and "↻" disappear on the display.

To repeat a selected set of tracks
Select the tracks with programmed playback, then press RANDOM/REPEAT on the remote control to select repeat playback.
- It is impossible to play a selected set of tracks in random order.

Programmed playback

Plays back up to 30 selected tracks in programmed order.

1 Press PRGM on the remote control during stop.
"PRGM" lights up on the display.

2 Press DISC DIRECT PLAY 1-3 to select a disc.
Go to the next step when the tray stops rotating.

3 Press the numbered buttons on the remote control to program a track.
The selected track number lights up on the display.
-To select the 25th track, press +10, +10 and 5.
-To select the 10th track, press +10 and 0.

4 Repeat step 2 and 3 to program other tracks.

5 Press ►.

- During programmed playback, you cannot select a disc or a track with the numbered buttons. "CAN'T USE" is displayed when you try to select a track .
- If the total playback time of the program exceeds 99:59 minutes, or if a track with a track number exceeding 30 is programmed, the playing time is displayed as "- -:- -".
- You cannot program more than 30 tracks. "FULL" is displayed.

To check the program
Press ◄◄ or ►► repeatedly during stop. The disc number, track number and program number are displayed in succession.

To clear the program
Press ■CLEAR during stop. "PRGM" disappears on the display.

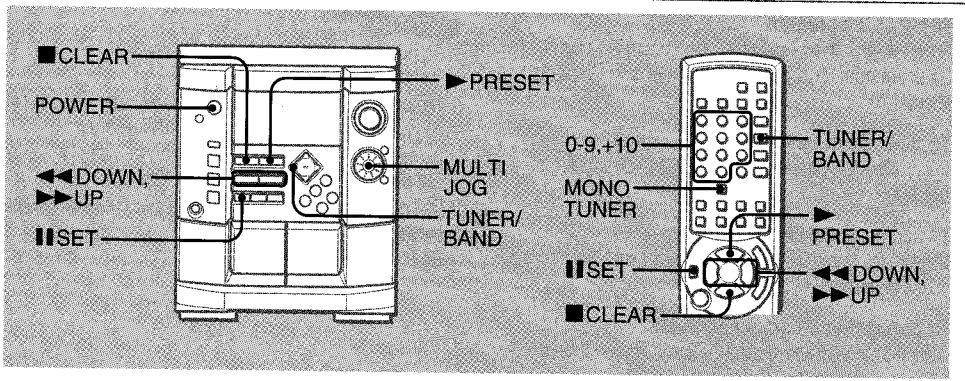
To add tracks to the program
Repeat step 2 and 3 before starting playback. The tracks are added to the end of the program.

To change the programmed tracks
Clear the program and reselect the tracks in your desired order.

Notes on CDs

- Do not place more than one disc on one tray.
- Do not tilt the unit with discs loaded.
- The unit may not play a CD-R/RW disc recorded on personal computers or certain kinds of CD-R/RW recorders.
- Do not attach adhesive label, etc. to either side of a CD-R/RW disc, as doing so may cause malfunction.
- Do not load an unrecorded CD-R/RW disc. The disc may be damaged.
- Do not use irregular-shaped CDs.

En



Manual tuning

1 Press TUNER/BAND repeatedly to select a band.
The unit switches to the radio from any other function and alternates between FM and AM.

2 Press ◄◄DOWN or ►►UP to tune in to a station.
"TUNE" is displayed when a station is tuned in.
"((((◎))))" lights up for FM stereo reception.

To search for a station automatically (Auto Search)
Hold down ◄◄DOWN or ►►UP.
The unit searches for a station up or down the band and stops at reception.
To stop the search manually, press ◄◄DOWN or ►►UP.

- Auto Search may not stop at stations with weak signals.

Preset tuning

Preset your favorite stations and tune them in directly.

Presetting stations

1 Press TUNER/BAND to select the band.

2 Press ◄◄DOWN or ►►UP to tune in to the desired station.

3 Press ❚❚SET to store the station.
The preset number, beginning from "1", appears on the display.

4 Repeat step 1 to 3 to preset other stations.

- You cannot store more than a total of 32 preset stations. "FULL" is displayed.

Tuning in to preset stations

On the unit

1 Press TUNER/BAND to select the band.

2 Press ►PRESET repeatedly or turn MULTI JOG.
With each press, the station with the succeeding preset number is tuned in.

On the remote control

1 Press TUNER/BAND to select the band.

2 Press the numbered buttons for the preset number of your desired station.
- To select preset number 20, press +10, +10 and 0.
- To select preset number 15, press +10 and 5.

To clear a preset station

1 Tune in to the station by preset tuning.
2 Press ■CLEAR, then press ❚❚SET within 4 seconds.
Preset numbers of preset stations in the band with higher numbers decrease by one.

Adjustments

Antennas

Keep antennas away from metallic objects, electrical equipment and cords.

FM antenna: Extend fully in a T-shape. If receiving condition is poor, connect optional outdoor antenna to FM 75 Ω terminal. Be sure to connect the shield braid of the antenna to the ⏚ terminal.

AM antenna: Rotate to find best reception.

To switch to monaural FM reception

Press MONO TUNER on the remote control. With each press, "MONO" and "STEREO" are displayed alternately on the display.

Tip:

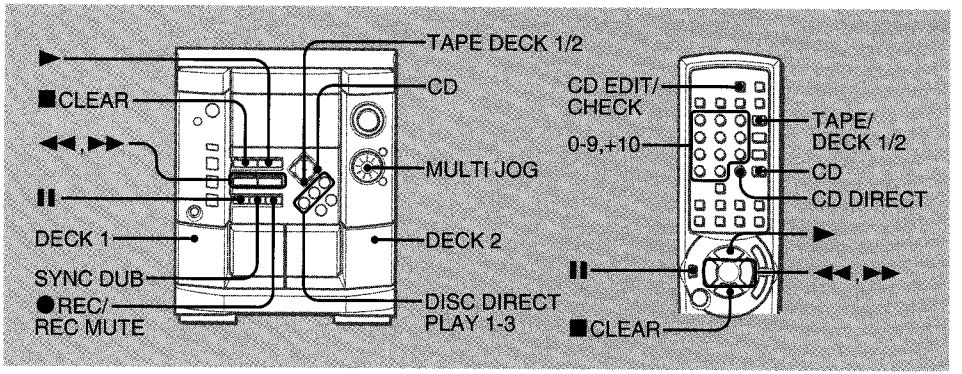
When FM stereo reception is poor, switching to monaural reduces noise.

To switch the AM tuning interval

Hold down TUNER/BAND and press POWER. With each press, the AM tuning interval alternates between 9 kHz/step and 10 kHz/step.

Tip:

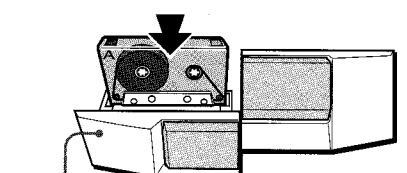
The default is 10 kHz/step. Change it only when using the unit in a 9 kHz/step area. Switching AM tuning interval clears all the preset stations.



Playback

Use only type I (normal) tapes.

1 Press TAPE and insert the tape in either deck.
Press ▲PUSH EJECT to open the cassette holder, and insert with the exposed side down and playback side facing out from the unit. Push the cassette holder to close.



2 Press ►.

To stop playback
Press ■.

To pause playback (DECK 2 only)
Press ❚❚. Press again to resume.

To fast forward or rewind
Press ◄◄ or ►►.

To select a deck (DECK 1 or DECK 2)
Press TAPE DECK 1/2 in stop mode when tapes are loaded in both decks. The deck number ("TP1" or "TP2") is displayed.

To reset the tape counter
Press ■CLEAR in stop mode, and the tape counter on the display is reset to "0000".
Opening and closing the cassette holder will also reset the tape counter.

To play continuously (DECK 1 to DECK 2)
Load tapes in both decks and start playback on DECK 1. Then, as soon as playback on DECK 1 finishes, playback on DECK 2 will start without interruption.

To play back type II (High position) tapes
Turn MULTI JOG until "SOFT" is displayed while playing a type II tape.
Then, the unit provides the optimum playback sound for type II tapes.

Notes on cassettes

- Use of 120-minute or longer tapes is not recommended since they are extremely thin and easily deformed or damaged.
- Take up any slack in the tape with a pencil or similar tool before use. Slack tape may jam in the mechanism.
- "SOFT" sound for type II tapes described above is canceled when the graphic equalizer is turned on, the cassette holder is opened, the function is changed, or the unit is turned off.

Basic recording

Use only type I (normal) tapes. DECK 2 is the recording deck. Only one side of the tape can be recorded at a time.

1 Insert the recording tape in DECK 2.
Press ▲PUSH EJECT to open the cassette holder, and insert with the exposed side down and the side to be recorded on facing out from the unit.
Wind up the tape to the desired point if needed.

2 Prepare the source.
To record CD(s), select the CD function and load disc(s).
To record a radio broadcast, tune in to the desired station.
To record a tape, select the tape function and insert the source tape in DECK 1.
To record from connected external equipment, select the VIDEO (AUX/DVD) function and prepare the equipment.

3 Press ●REC/REC MUTE to start recording.
When recording a CD or tape, playback starts automatically.
When recording input from connected equipment, manually start playback of the source.

- Digital input from external equipment cannot be recorded.
- When recording on tape, close the disc compartment before starting to record.
- Volume or tone (except BBE) adjustment does not affect recording.
- "CAN'T REC" is displayed if you attempt to record a tape with the tab broken off.
- When recording, "OVERLOAD" is displayed if the input level from the VIDEO/AUX/DVD jacks is too high. In this case, stop recording and adjust the input level until "OVERLOAD" disappears (see "Playing an analog source").

To stop recording
Press ■.

To pause recording (only for TUNER or VIDEO/AUX/DVD source)
Press ❚❚. Press again to resume.

To record a selected set of tracks from a CD
Program the desired tracks (see "Programmed playback") and then press ●REC/REC MUTE.

To record a 4-second blank space (only for TUNER or VIDEO/AUX/DVD source)
1 Press ●REC/REC MUTE during recording or in recording pause mode.
"REC" flashes on the display for 4 seconds (a blank space is made in the meantime) and then the unit enters recording pause mode.
To record less than a 4-second blank space, press ●REC/REC MUTE again while "REC" flashes.
To record more than a 4-second blank space, press ●REC/REC MUTE again after the unit enters recording pause mode. Each time the button is pressed, a 4-second blank space is added.
2 Press ❚❚ to resume recording.

To erase a tape
1 Insert the tape in DECK 2. Set the tape to the desired point if needed.
2 Press TAPE to select "TP2".
3 Press ●REC/REC MUTE.

Whole tape dubbing

1 Press TAPE.

2 Insert the original tape in DECK 1 and the recording tape in DECK 2.

3 Press SYNC DUB.
The tapes are rewound to the beginning of the front side and recording starts.

- Dubbing cannot start from a point halfway in the tape.
- Only one side of the tape can be recorded at a time.

To stop dubbing
Press ■.

Edited CD recording

AI Edit Recording

When recording a whole CD, AI Edit Recording takes the length of your tape into account and rearranges the recording order of the tracks if necessary, so that no track is cut short at the end of the side. Prepare a tape long enough to record the CD.

1 Insert the recording tape in DECK 2.

2 Press CD to select the CD function and load the disc.

3 Press CD EDIT/CHECK once on the remote control.
The "EDIT" indicator lights up and "AI C-00" appears on the display.

4 Press DISC DIRECT PLAY 1-3 to select a disc.

5 Press the numbered buttons on the remote control to enter the length of the recording tape.
10 to 99 minutes can be specified.
- For a 60-minute tape press 6 and 0.
In a few seconds, the unit determines the tracks to be recorded for each side.
The recording time left for side A appears on the display.
- ◄◄, ►► or MULTI JOG can also be used to specify tape length.

6 Press ●REC/REC MUTE to start recording on side A.
The tape is rewound to the beginning of side A and recording starts.
Go to the next step when recording on side A finishes.

7 Press CD EDIT/CHECK once on the remote control.
The recording time left for side B appears on the display.

8 Turn over the tape and press ●REC/REC MUTE to start recording on side B.

- AI Edit Recording cannot be used with discs with more than 30 tracks. "TR OVER" is displayed.
- Recording cannot start from a point halfway in the tape.

En

Programmed Edit Recording

As you program the CD tracks to record, Programmed Edit Recording displays the remaining recording time for each side of the tape, so you can easily select a set of desired tracks within the length of your tape.

En

1 Insert the recording tape in DECK 2.

2 Press CD to select the CD function and load the disc.

3 Press CD EDIT/CHECK twice on the remote control.
The "PRGM" and "EDIT" indicators light up and "PRGMC-00" appears on the display.

4 Press the numbered buttons on the remote control to enter the length of the recording tape.
10 to 99 minutes can be specified.
• ◄◄, ►► or MULTI JOG can also be used to specify tape length.

5 Press DISC DIRECT PLAY 1-3 to select a disc. Then, press the numbered buttons on the remote control to select the first track to be recorded on side A.
-To select the 25th track, press +10, +10 and 5.
-To select the 10th track, press +10 and 0.

6 Repeat step 5 to select the rest of the tracks for side A.
The remaining recording time of side A is displayed. You cannot select a track with a longer playing time.

7 Press CD EDIT/CHECK on the remote control to switch to side B and select the tracks for the side.

8 Press CD EDIT/CHECK on the remote control to switch back to side A and press ● REC/REC MUTE to start recording on side A.
The tape is rewound to the beginning of side A and recording starts.
Go to the next step when recording on side A finishes.

9 Press CD EDIT/CHECK on the remote control to switch to side B, turn over the tape, and press ● REC/REC MUTE to start recording on side B.

- You cannot program more than 30 tracks. "FULL" is displayed.
- You cannot program a track with a track number larger than 30.
- Recording cannot start from a point halfway in the tape.

To stop recording
Press ■. Recording and CD playback stop simultaneously.

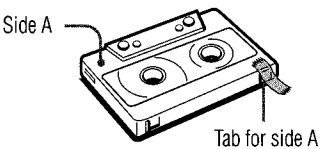
To check the program
1 Before recording, press CD EDIT/CHECK on the remote control to select side A or B.
2 Press ◄◄ or ►► repeatedly. The track number and program number are displayed in succession.

To change the program of each side
Press CD EDIT/CHECK on the remote control to select side A or B, and press ■ CLEAR to clear the program for the selected side. Then, select tracks again.

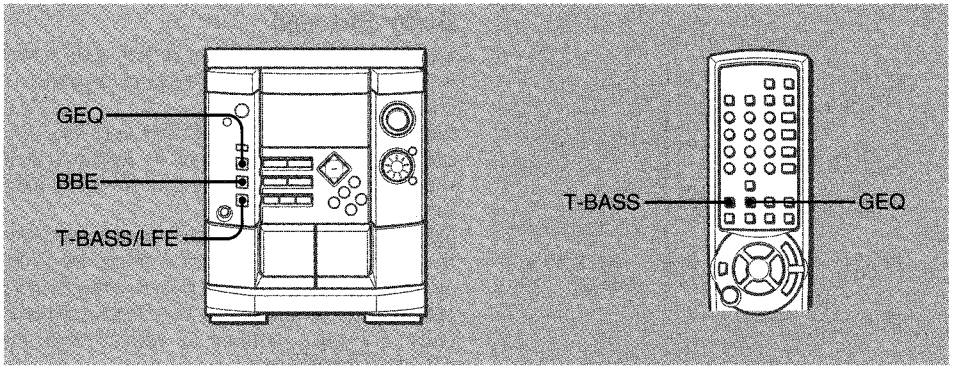
To clear the edit program
Press ■ CLEAR twice so that "EDIT" disappears from the display.

To prevent accidental erasure

Break off the plastic tab of the cassette tape with a screwdriver or other pointed tool. To record on the tape again, cover the detection slot with adhesive tape.



SOUND ADJUSTMENTS



Graphic equalizer

Selects a sound equalization curve to match the music type.

Press GEQ repeatedly to select one of the three equalization curves.

- ROCK: Powerful sound emphasizing treble and bass
- POP: More presence in the vocals and midrange
- CLASSIC: Enriched sound with heavy bass and fine treble

To display the current GEQ mode

Press GEQ once.
The mode will be displayed for 4 seconds.

To cancel equalization

Press GEQ repeatedly until "GEQ OFF" is displayed.

BBE

Enhances high frequency for sound clarity .

Press BBE repeatedly to select one of the three enhancement levels or the off position.

- When the sound becomes distorted with the BBE effect, cancel it.
- The BBE system cannot be turned on when digital input is selected or Dolby Pro Logic is activated. "CAN'T USE" is displayed.

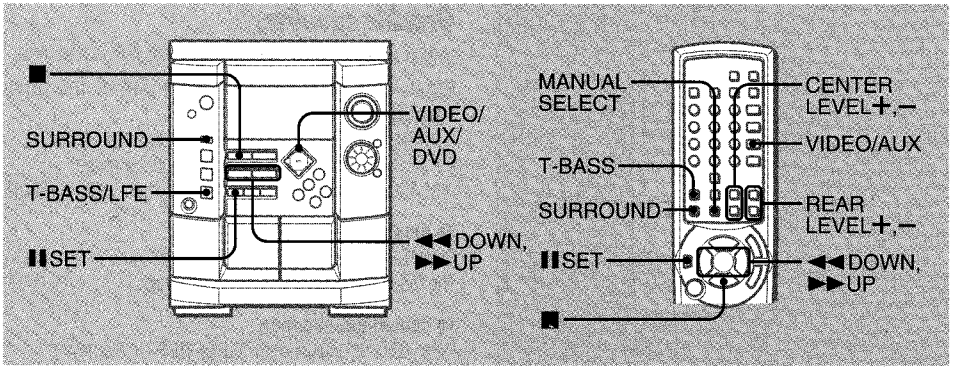
Super T-BASS

Emphasizes low frequencies for a powerful sound.

Press T-BASS/LFE (T-BASS on the remote control) repeatedly to select one of the three emphasis levels or the off position.

- When the sound becomes distorted with the T-BASS effect, cancel it.

En



Playing an analog source

(Playing equipment connected to the VIDEO/AUX/DVD jacks)

1 Select analog input.
Hold down VIDEO/AUX/DVD and release the button when "ANALOG" appears on the display.

2 Play the connected equipment.

To adjust the sound level of the external analog source

When the analog signal input from the connected equipment is too high, "OVERLOAD" lights up continuously on the display.
When this occurs, or when the sound level is much lower than that of other function sources, adjust the sound level.
1 Select analog input and play the equipment.
2 Press ◀◀ or ▶▶ so that the sound level becomes the same as that of other function sources.

• During recording, the sound level cannot be adjusted.

Playing a digital source

(Playing equipment connected to the DIGITAL IN (PCM/DOLBY DIGITAL) OPTICAL (VIDEO/AUX/DVD) jack)

1 Select digital input.
Hold down VIDEO/AUX/DVD and release the button when "DIGITAL" appears on the display.
The "DIGITAL" indicator lights up on the display.

2 Play the connected equipment.

• When digital input is selected, the BBE system is automatically canceled.

To change the displayed source name

Hold down VIDEO/AUX/DVD and press POWER when the unit is turned on. Repeat the procedure to select "VIDEO", "AUX" or "DVD".

Dolby Surround

With this unit's built-in Dolby Digital decoder, video software recorded in Dolby Digital or Dolby Pro Logic can be played back in home theater sound.
Dialogs are heard in the front and center sound field, while ambient sounds like cars and crowds are reproduced on all sides of the listener, all in all for an incredibly lifelike audio-visual experience.
Dolby Pro Logic has four independent channels; left, center, right, and surround. These four channels are encoded into the two tracks of a conventional stereo program source. This unit's Dolby Digital decoder recovers these four channels on playback.
Dolby Pro Logic software is marked with the DOLBY SURROUND *logo.*
Dolby Digital, in contrast to Dolby Pro Logic, is digitized, and has separate left and right surround channels plus an additional low-frequency effects (LFE) channel. Thus it is also referred to as "5.1-channel" Dolby Digital, with the LFE channel counted as "0.1" channel.
Dolby Digital software is marked with the DOLBY DIGITAL *logo.*

Notes on Dolby Surround

- Dolby Digital sound and Dolby Pro Logic sound can only be obtained when playing back software with their respective logos.
- Make sure all the supplied speakers are placed and connected properly (see "Positioning the speakers").
- Make sure the video equipment can play back the particular medium of the Dolby Digital or Dolby Pro Logic software (LDs or DVDs, for example). Consult the operating instructions for the equipment. You cannot play DVDs on the unit's CD player.
- External digital input of this unit accepts Dolby Digital bitstream signals, or linear PCM signals with a sampling frequency of 32 kHz, 44.1 kHz or 48 kHz. This unit cannot play software whose sampling frequency is 96 kHz.
- Some DVD players connected digitally to this unit may cause noise during some DVD operation such as when searching a disc, skipping a chapter, etc.
- This unit does not support the DTS Digital Sound system.

Playing Dolby Surround sound

Playing Dolby Digital sound

For software with the DOLBY DIGITAL logo.

1 Select digital input. (See "Playing a digital source")
The "DIGITAL" indicator lights up on the display.

2 Play the Dolby Digital source on the video equipment.
The "DIGITAL" indicator lights up on the display.

- If Dolby Digital software is played back via the analog connection, the sound will be in Dolby Pro Logic.
- Dolby Digital mode is automatically changed to 2CH ST mode (see below) when the headphones are plugged in.

Playing Dolby Pro Logic sound

For software with the DOLBY SURROUND logo.

1 Select analog input. (See "Playing an analog source")

2 Play the Dolby Pro Logic source on the video equipment.

3 Press SURROUND.
The "PRO LOGIC" indicator lights up on the display.

- Dolby Pro Logic sound is automatically canceled when the headphones are plugged in.
- When Dolby Pro Logic is activated, the BBE system is automatically canceled.

To cancel Dolby Pro Logic
Press SURROUND repeatedly until "OFF" is displayed.

Dolby Surround modes

Selects a Dolby Surround mode to match the connected speaker for playing Dolby Digital and Dolby Pro Logic sound

Press SURROUND repeatedly to select one of the following modes.

- NORMAL: When all speakers are connected.
- PHANTOM: When the center speaker is not connected. The center channel signals are output through the front speakers.
- 3 STEREO: When the surround speakers are not connected. The rear channel signals are output through the front speakers.
- 2CH ST (Dolby Digital) or OFF (Dolby Pro Logic): When neither the center nor the surround speaker units are connected. When 2CH ST mode is selected, "STEREO" appears on the display.

- Dolby Digital modes can only be selected when a Dolby Digital source is being played via digital connection.
- When playing 2-channel Dolby Digital sound that is not Pro Logic encoded, Dolby Pro Logic is activated in stead of Dolby Digital.

To display the current Dolby Surround mode
Press SURROUND once.
The mode will be displayed for 4 seconds.

En

Subwoofer On or Off mode

If you connect a subwoofer to this unit, change the Subwoofer mode to "S-W ON". Low-frequency effect signals are sent to the subwoofer. In "S-W OFF", low-frequency effect signals are directed to the other speakers.

En

1 Play the Dolby Surround sound.

2 Press MANUAL SELECT on the remote control. "S-W OFF" or "S-W ON" is displayed.

3 Press ◄◄ to display "S-W OFF" or ►► to display "S-W ON" to select the desired mode.

- Subwoofer mode setting is common to Dolby Digital and Dolby Pro Logic.

Adjustments

Speaker level adjustment

The unit is equipped with a built-in test signal generator for easy balance adjustment of the channels. The test signal "travels" from channel to channel. Adjust the sound level for the same apparent loudness from each channel at listening position.
The left and right front speakers create the stereo effect.
The center speaker helps achieve precise sound positioning over a broad sound field.
The surround speakers enhance the "depth" of the sound field.

1 Press SURROUND repeatedly to select the mode for the speaker configuration (see "Dolby Surround modes").
   - For playback with the supplied speakers, select "NORMAL".

2 Hold down MANUAL SELECT on the remote control until "L" flashes in the display.
   The indication for the currently adjustable channel flashes in the display and the test signal automatically cycles through the following channels:
   - L: The left front speaker
   - C: The center speaker
   - R: The right front speaker
   - RS: The right surround speaker
   - LS: The left surround speaker

3 Press ◄◄ or ►► to adjust the sound level.
   - For the left and right front speakers: Press ◄◄ to shift the balance to the left and ►► to shift to the right.
   - For the center and the surround speakers: Press ◄◄ to de-emphasize the channel and ►► to emphasize the channel.

- The channel will not change while you are adjusting the sound level.
- Speaker level adjustment is available only for speakers that are activated.
- Adjustment of speaker levels is common to Dolby Digital and Dolby Pro Logic.
- A clicking sound might be heard with the test signal during level adjustment. This is due to the circuit characteristics and is not a malfunction.

To stop speaker level adjustment
Press ■.

To adjust the speaker level without the test signal
1 Play the Dolby Surround sound.
2 Press SURROUND repeatedly to select the mode for the speaker configuration.
3 Press MANUAL SELECT repeatedly on the remote control until "L/R" is displayed.
4 Press ◄◄ or ►► to adjust the sound level of the front speakers.
5 Repeat steps 3 and 4 to adjust the sound level of the other speakers.

To adjust the center speaker level directly on the remote control
1 Play the Dolby Surround sound.
2 Press SURROUND repeatedly to select "NORMAL" or "3 STEREO".
3 Press CENTER LEVEL + or —.

To adjust the rear (surround) speaker level directly on the remote control
1 Play the Dolby Surround sound.
2 Press SURROUND repeatedly to select "NORMAL" or "PHANTOM".
3 Press REAR LEVEL + or —.

- You cannot adjust the surround speaker level for LS and RS channels separately. To do that, see "To adjust the speaker level without the test signal".

Low-frequency effect level adjustment

Dolby Digital has a discrete channel for LFE (low-frequency effects), which reproduces sounds such as explosions and rumbles in movie soundtracks with astonishing realism.

1 Play the Dolby Digital sound.

2 Hold down T-BASS/LFE (T-BASS on the remote control) until "LFE" is displayed.

3 Press ◄◄ or ►► repeatedly to adjust the LFE level.
Adjust between OFF and -20 dB to 0 dB (maximum effect) in 5 dB steps. The default is "LFE 0DB".

- LFE is not available for Dolby Pro Logic.

Delay time adjustment

Sounds from the surround speakers or the center speaker are reproduced a split second after the front speakers for the effect of "depth".

1 Play the Dolby Surround sound.

2 Press SURROUND repeatedly to select the mode for the speaker configuration.

3 Press MANUAL SELECT repeatedly on the remote control to select delay time to adjust.
- C _MS: Delay time setting for center speaker
- S _MS: Delay time setting for surround speakers

4 Press ◄◄ or ►► to adjust the delay time.
- For center speaker: Adjust the delay time so that screen dialogs are heard clearly and naturally.
  Adjust between 0 ms (milliseconds) and 5 ms in 1 ms steps. The default is "C 0MS" (no delay).
- For surround speakers:
  Dolby Digital: Adjust between 0 and 15 ms in 5 ms steps. The default is "S 5MS".
  Dolby Pro Logic: Adjust between 15 and 30 ms in 5 ms steps. The default is "S 20MS".

- Adjustment of the delay time setting in Dolby Digital affects that of Dolby Pro Logic, and vice versa. Surround speaker delay time in Dolby Digital of 0 ms, 5 ms, 10 ms and 15 ms, corresponds to 15 ms, 20 ms, 25 ms and 30 ms in Dolby Pro Logic, respectively.
- Delay time adjustment is available only for speakers that are activated.

Dynamic range adjustment

In Dolby Digital, dynamic range between soft and loud sounds can be adjusted to suit your desired playback volume.

1 Play the Dolby Digital sound.

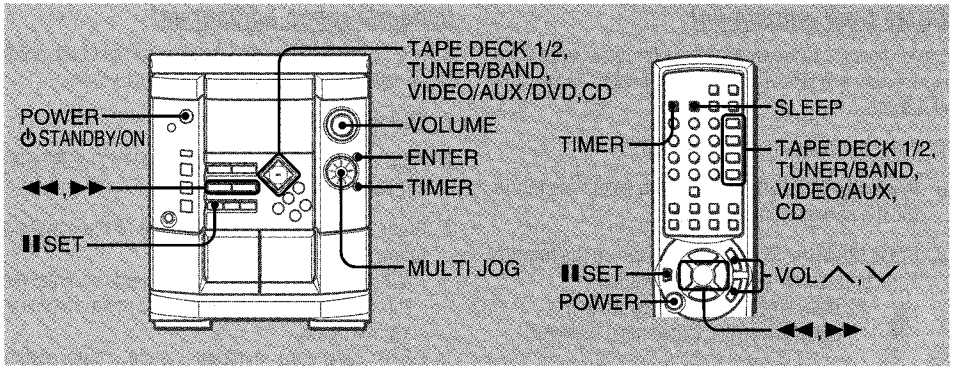
2 Hold down ❚❚ until "MIDNIGHT THEATER" appears on the display.

3 Press ◄◄ or ►► to select one of the dynamic range modes.
- MIN: Minimum dynamic range compression. Enjoy the full dynamic range of the sound track as experienced in a movie theater.
- STD: Standard dynamic range compression recommended by the software producers when playing back at home. Default.
- MAX: Maximum dynamic range compression. Keeps soft sounds and dialogs intelligible even with the overall volume turned down. Select this mode when you have to keep the volume low, for example, when playing back late at night.

- Dynamic range adjustment is not available for Dolby Pro Logic.
- ❚❚ acts as the pause button during recording.

En

TIMER OPERATIONS



En

Sleep timer

Turns off the unit automatically after a specified time.

1 Press SLEEP on the remote control.
"SLEEP" appears on the display.

2 Press ◀◀ or ▶▶ repeatedly to set the sleep timer duration.
With each press, the timer duration changes in 5-minute steps between 5 to 240 minutes. If there is no button input for 4 seconds, the current setting is entered automatically. The unit turns off after the selected time.
• MULTI JOG is also available in place of ◀◀ or ▶▶.

Tip:
The display is dimmed while the sleep timer is active.

To check the remaining time until the unit turns off
Press SLEEP on the remote control. The remaining time is displayed for 4 seconds.

To cancel the sleep timer
Press SLEEP twice on the remote control so that "SLEEP oFF" is displayed.

Timer playback

Turns on the unit at a specified time for the specified duration. Make sure the clock is set correctly.

1 Press one of the function buttons to select the desired playback source.

2 Press TIMER.
"🕘" indicator lights up and "🕒 PLAY" appears on the display. Then, the timer-on time and the source name appear alternately on the display.

3 Press ◀◀ or ▶▶ to set the timer-on time, then press ❚❚SET or ENTER.
If ◀◀ or ▶▶ is not pressed within 6 seconds, you will exit the timer setting mode and the previous setting, however, is entered.
• MULTI JOG is also available in place of ◀◀ or ▶▶.

4 Press ◀◀ or ▶▶ to set the timer-activated duration, then press ❚❚SET or ENTER.
With each press, the timer-activated duration changes in 5-minute steps between 5 to 240 minutes.
If there is no button input for 4 seconds, the current setting is entered automatically.
• MULTI JOG is also available in place of ◀◀ or ▶▶.

5 Adjust the volume and tone for timed playback.
If the volume level is set to 21 or higher, it is automatically turned down to 20 when the unit is turned on by the timer.

6 Prepare the source.
To play CD(s), load disc(s).
To play the radio, select the band and tune in to the desired station.
To play a tape, insert the tape.
To play external equipment connected to the DIGITAL IN (PCM/DOLBY DIGITAL) OPTICAL (VIDEO/AUX/DVD) jack or the VIDEO/AUX/DVD jacks, set an external timer for the equipment so that its playback begins at the same time.

7 Press POWER ⏻STANDBY/ON to turn the unit off.
"🕘" remains on the display to indicate the timer standby mode.
At timer-on time, the unit turns on and plays the selected source. After the specified timer-activated duration, the unit turns off again.

- Timer playback will not begin unless the unit is turned off first.
- Connected equipment cannot be turned on or off by the built-in timer of this unit. Use an external timer.
- The timer source can be changed with the function buttons before completing step 3.

To display the timer setting
Press TIMER.
The timer-on time, the source and the timer-activated duration are displayed for 6 seconds.

Tip:
Timer setting can be displayed even while the unit is turned off, and at that time if you press ENTER or ▮▮ within 6 seconds after TIMER is pressed, you can enter the timer setting mode and change the setting.

To change the timer setting
Re-set the timer again.

To cancel the timer
Press TIMER repeatedly until "◷ OFF" is displayed. "◴" disappears from the display.

Tip:
Your timer setting is retained even if the timer is canceled. Next time the timer is activated, you can change your previous setting, or simply use the same setting again.

Timer recording

Timer recording is available only for TUNER and VIDEO/AUX/DVD (with an external timer) sources.

1 Press either TUNER/BAND or VIDEO/AUX/DVD to select a source.

2 Press TIMER repeatedly until "◴REC" appears on the display.

3 Carry out step 3 to step 5 described in "Timer playback".

4 Prepare the source.
To record the radio, select the band and tune in to the desired station.
To record external equipment connected to the VIDEO/AUX/DVD jacks, set an external timer for the equipment so that its playback begins at the same time.

5 Insert the recording tape in DECK 2 and then turn the unit off.

• Digital input from external equipment cannot be recorded.

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Care and maintenance

Occasional care and maintenance of the unit and the software are needed to optimize the performance of your unit.

To clean the cabinet

Use a soft and dry cloth. If the unit surfaces are extremely dirty, use a soft cloth lightly moistened with mild detergent solution. Do not use strong solvents such as alcohol, benzine or thinner.

To clean the tape heads

Dirty tape heads cause sound deterioration. After every 10 hours of use, clean the tape heads with a head cleaning cassette. Refer to the instructions of the cleaning cassette.

To demagnetize the tape heads

Use a demagnetizing cassette after every 20 to 30 hours of use. Refer to the instructions of the demagnetizing cassette.

Care of CDs

When a CD becomes dirty, wipe it from the center out with a cleaning cloth. After playing a CD, store it in its case. Do not keep it in hot or humid places.

Care of tapes

Store tapes in their cases after use. Do not leave tapes near magnets, motors, television sets, or any source of magnetism. Do not expose tapes to direct sunlight, or leave them in a car parked in direct sunlight.

Troubleshooting

If your unit fails to perform properly, check the following guide and the relevant sections of the Operating Instructions.

There is no sound.

- Are the speakers and AC power cord connected properly?

The unit shut off suddenly.

- Possibly a short circuit in the speaker terminals. Disconnect the AC power cord from the AC power outlet and re-connect the speaker cords correctly.

The unit blacks out when the unit is turned off.

- Is ECO mode set to on?

Erroneous display.

- Reset the unit.

Poor radio reception.

- Check antenna connection. Adjust the antenna to find the best reception.
- Move unit and antenna away from other electric appliances and cords.

The tape does not run.

- Is the deck in pause?

Poor tape sound.

- Check for dirty heads. Clean them if needed.
- Use type I (normal) tapes.

Cannot record.

- Is the erasure prevention tab of the tape broken off? If so, cover the detection slot with adhesive tape.

The CD player works poorly.

- Is the disc correctly loaded?
- Is the disc dirty?
- Is the lens affected by condensation? If so, wait approximately one hour and try again.

Resetting the unit

If an unusual condition occurs in the display window or the cassette deck, reset the unit as follows:

1 Press POWER to turn off the power.
If the power cannot be turned off, disconnect the AC power cord, then plug it in again.
2 Hold down ■ and press POWER.
Everything stored in memory after purchase is cleared.

Specifications

MAIN UNIT CX-NDS50/CX-NDS55

TUNER

FM tuning range	87.5 MHz to 108 MHz
FM usable sensitivity (IHF)	13.2 dBf
FM antenna terminals	75 ohms (unbalanced)
AM tuning range	530 kHz to 1710 kHz (10 kHz step) 531 kHz to 1602 kHz (9 kHz step)
AM usable sensitivity	350 µV/m
AM antenna	Loop antenna

AMPLIFIER

Power output	Front: 70 W + 70 W (50 Hz - 20 kHz, THD less than 1 %, 6 ohms) 88 W + 88 W (1 kHz, THD less than 10 %, 6 ohms) Rear (Surround): 25 W + 25 W (1 kHz, THD less than 1 %, 8 ohms) 35 W + 35 W (1 kHz, THD less than 10 %, 8 ohms) Center: 25 W (1 kHz, THD less than 1 %, 8 ohms) 35 W (1 kHz, THD less than 10 %, 8 ohms)
Total harmonic distortion	0.1 % (35 W, 1 kHz, 6 ohms, DIN AUDIO/Front)
Inputs	VIDEO/AUX/DVD: 300 mV (adjustable) DIGITAL IN (PCM/DOLBY DIGITAL) OPTICAL (VIDEO/AUX/DVD): Linear PCM signals (32 kHz, 44.1 kHz and 48 kHz) and Dolby Digital bitstream
Outputs	FRONT SPEAKERS: 6 ohms or more SURROUND SPEAKERS: 8 ohms to 16 ohms CENTER SPEAKER: 8 ohms or more SUB WOOFER: 1 V PHONES: 32 ohms or more

CASSETTE DECK

Track format	4 tracks, 2 channels stereo
Frequency response	50 Hz - 15 kHz
Recording system	AC bias
Heads	DECK 1: playback x 1 DECK 2: recording/playback x 1, erase x 1

CD PLAYER

Laser	Semiconductor laser (λ = 780 nm)
D/A converter	1 bit dual
Signal-to-noise ratio	85 dB (1 kHz, 0 dB)
Harmonic distortion	0.05 % (1 kHz, 0 dB)

GENERAL

Power requirements	120 V AC, 60 Hz
Power consumption	175 W
Power consumption in standby mode	With ECO mode on: 0.6 W With ECO mode off: 35 W
Dimensions (W x H x D)	260 x 326 x 340 mm (10 1/4 x 12 7/8 x 13 1/2 in.)
Weight	8.2 kg (18 lbs 1 oz)

FRONT SPEAKERS SX-NAJ502

Speaker system	3 way, bass reflex (magnetic shielded)
Speaker units	Woofer: 160 mm (6 3/8 in.) cone Tweeter: 60 mm (2 3/8 in.) cone Super tweeter: 20 mm (13/16 in.) ceramic
Impedance	6 ohms
Dimensions (W x H x D)	230 x 324 x 253 mm (9 1/8 x 12 7/8 x 14 in.)
Weight	4.5 kg (9 lbs 15 oz)

SURROUND SPEAKERS SX-R290

Speaker system	1 way, bass reflex
Speaker units	Full range: 100 mm (4 in.) cone
Impedance	8 ohms
Dimensions (W x H x D)	150 x 132 x 142 mm (6 x 5 1/4 x 5 5/8 in.)
Weight	0.8 kg (1 lbs 12 oz)

Accessories: Wall mounting screws (2)

CENTER SPEAKER SX-C610

Speaker system	1 way, bass reflex
Speaker units	Full range: 100 mm (4 in.) cone
Impedance	8 ohms
Dimensions (W x H x D)	260 x 132 x 216 mm (10 1/4 x 5 1/4 x 8 5/8 in.)
Weight	1.0 kg (2 lbs 3 oz)

Specifications and external appearance are subject to change without notice.

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Check copyright laws relevant to recordings from discs, radio or tape for the country where the unit is to be used.

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NOTE

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

CAUTION

Modifications or adjustments to this product, which are not expressly approved by the manufacturer, may void the user's right or authority to operate this product.

For assistance and information

call toll free 1-800-BUY-AIWA

(United States and Puerto Rico)

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